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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,845	02/23/2004	Yu-Nan Pao	LOU 115	5516

7590 01/19/2006

RABIN & BERDO, P.C.  
Suite 500  
1101 14th Street  
Washington, DC 20005

EXAMINER

SEMBER, THOMAS M

ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,845	<b>Applicant(s)</b> PAO ET AL.	
	<b>Examiner</b> Thomas M. Sember	<b>Art Unit</b> 2875	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dilouya.

Dilouya (see particularly figure 4) discloses an apparatus for homogeneously distributing lights, comprising: a single-layered light guide plate 20; an incidence microstructure 22' being arranged on a surface of the light guide plate and directly in front of and opposite to a light source 10; and an emergence microstructure 24', the emergence microstructure being arranged on a surface of the light guide plate opposite to the incidence microstructure; wherein the lights emitted by the light source pass through said apparatus thereby being homogeneously distributed. Regarding claim 2, the incidence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 3, the emergence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 4, the emergence microstructure is a micro lens array structure. Regarding claim 5, the micro lens array structure is a structure selected from 'the groups consisting of honeycombed structure, circular dot structure

and irregular structure (as broadly claimed, prisms 24' are irregular surfaces).

Regarding claim 6, the light source is a plurality of lamps (35a-c).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. Yamashita et al discloses an apparatus for homogeneously distributing lights, comprising: a single-layered light guide plate 14; an incidence microstructure 13 being arranged on a surface of the light guide plate and directly in front of and opposite to a light source 1; and an emergence microstructure 14, the emergence microstructure being arranged on a surface of the light guide plate opposite to the incidence microstructure; wherein the lights emitted by the light source pass through said apparatus thereby being homogeneously distributed. Regarding claim 2, the incidence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 3, the emergence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 4, the emergence microstructure is a micro lens array structure. Regarding claim 5, the micro lens array structure is a structure

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selected from 'the groups consisting of honeycombed structure, circular dot structure and irregular structure (as broadly claimed, prisms 13u are irregular surfaces).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Plummer. Plummer discloses an apparatus for homogeneously distributing lights, comprising: a single-layered light guide plate 62; an incidence microstructure 82 having straight grooves being arranged on a surface of the light guide plate and directly in front of and opposite to a light source 32'; and an emergence microstructure 84 having straight grooves, the emergence microstructure being arranged on a surface of the light guide plate opposite to the incidence microstructure; wherein the lights emitted by the light source pass through said apparatus thereby being homogenously distributed. Regarding claim 2, the incidence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 3, the emergence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 4, the emergence

microstructure is a micro lens array structure. Regarding claim 5, the micro lens array structure is a structure selected from 'the groups consisting of honeycombed structure, circular dot structure and irregular structure (as broadly claimed, prisms 20 are irregular surfaces). Regarding claim 6, the light source is a plurality of lamps 14.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borchardt in view of Adachi et al. Borchardt discloses the claimed invention except for the teaching that the incidence microstructure arranged on the light guide plate is directly in front of and opposite to a light source and the light guide plate is a single layer. Adachi et al teaches an incidence surface 710 arranged on a light guide that is directly in front of and opposite to a light source 100c. It would have been obvious to one skilled in the art at the time the invention was made to modify the lighting device of Borchardt to include a light source opposite to the light incident surface as taught by Adachi et al in order to efficiently illuminate the light guide of Borchardt.

Regarding the fact that Borchardt fails to teach a light guide plate being a single layer. It would have been obvious to one skilled in the art at the time the invention was

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made to make the light guide plate single layered since such a modification has been well recognized by the United States Federal Court as merely an obvious engineering design choice. (See *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the Dilouya reference, the applicant argues that incidence microstructure 23 is not in front or opposite to a light source. Based on applicant's amendment, the examiner now refers to incidence microstructure as detail 22 which is opposite to the light source of Dilouya. Regarding applicant's arguments that there is no reference to a "homogeneous light" in the Dilyouya reference, Dilouya does provide a lighting device which forms a uniform beam. Thus the Dilouya reference does meet the "homogeneous" limitation.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 8 A.M- 5.30 p.m. first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thomas M Sember', with a long, sweeping horizontal stroke at the end.

Thomas M Sember  
Primary Examiner  
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